

State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO Lt. Governor Division of Air Quality
Bureau of Air Permits
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

September 23, 2014

BOB MARTIN

Commissioner

Mr. Steve Riva Chief, Permitting Section USEPA, Region 2 290 Broadway, 25th Floor New York, NY 10007-1866

Re:

Hess Newark Energy Center

Facility Program Interest No. 08857, Permit Activity No.: BOP140001

Dear Steve:

This notice is required by the provisions of 40 CFR Part 70 and N.J.A.C. 7:27-22 and is to inform you of the Department's receipt of an administratively complete application for a minor modification to an approved Operating Permit for Hess Newark Energy Center, which is located at 955 Delancy Street, Newark, NJ 08105.

The facility proposes to make the following changes to the operating permit:

- Revision of stack parameters for the combustion turbines (PT1 and PT2), Emergency Generator (PT6), Fire Pump (PT7) and Cooling Tower (PT8) to reflect as built parameters. The air quality impact of the turbine operation was originally assessed at the design stack diameter of 22 feet and was found to comply with all air quality standards. That stack was built at the diameter of 18.5 feet, and it again demonstrated compliance with all air quality standards through computer modeling. The as built conditions of the cooling tower, the emergency generator and the fire water pump all vary somewhat from what were designed and modeled, and were therefore remodeled. Results show no violations of any air quality standards are expected.
- Separation of Auxiliary boiler from emission point PT1 and creation of a separate stack (PT3) for the auxiliary boiler with appropriate parameters. Modeling has been performed with separate stacks.
- Change reference to auxiliary boiler stack at U1, OS Summary, REF #7 from PT1 to PT3.
- Add the language "For auxiliary boiler" to the beginning of the applicable requirement for permit conditions U1, OS Summary, REF #95 through #98 to clarify that these 40 CFR Part 60 Subpart Dc requirements only apply to the auxiliary boiler and not the turbines and duct burners.
- Add the language "This condition has been satisfied" to the end of the applicable requirement for permit condition GR1, REF #16 to clarify that the facility has submitted the administrative amendment, required to be submitted by this permit condition, in order to apply the NOx and VOC emission credits, that were purchased prior to issuing a draft initial operating permit, to this project.

If you would like to comment on this application, please contact me in writing at the above address within 45 days. The 45-day review period expires on November 8, 2014. Should you want more information regarding this minor modification, please call me at 609-633-1129.

Sincerely,

David Owen

Bureau of Air Permits

Environmental Protection Agency

during the project and after it is terminated.

(1) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

[40 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

§ 60.15 Reconstruction.

- (a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.
- (b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
- (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.
- (c) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
- (1) Name and address of the owner or operator.
- (2) The location of the existing facility.
- (3) A brief description of the existing facility and the components which are to be replaced.
- (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
- (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

- (6) The estimated life of the existing facility after the replacements.
- (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.
- (e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.
- (f) The Administrator's determination under paragraph (e) shall be based
- (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
- (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
- (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
- (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
- (g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

§60.16 Priority list.

PRIORITIZED MAJOR SOURCE CATEGORIES

Pri- ority Num- ber¹	Source Category
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment (a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment (c) SOCMI fugitive sources
	(d) SOCMI regulate sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4. 5.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins

Riva, Steven

From:

Owen, David [David.Owen@dep.state.nj.us]

Sent: To: Thursday, January 09, 2014 11:36 AM Riva, Steven; Chan, Suilin; Majette, Yolanda

Cc:

Hogan, Michael; Khan, Aliya

Subject:

New Jersey Consolidated Alternative Site Information and Screening Analysis Notice

Consolidated Alternative Site Information and Screening Analysis for Hess Newark Energy Center Program Interest Number: 08857, Permit Activity Number: BOP110001

As a courtesy, I am providing you with this notice of New Jersey's intent to include the Consolidated Alternative Site Information and Screening Analysis, submitted by Hess on April 19, 2013, as part of the public record for the Newark Energy Center Initial Operating Permit, which was approved on November 1, 2012. The Newark Energy Center is located at 955 Delancy St., Newark, NJ 07105. The public notice and the Consolidated Alternative Site Information Screening Analysis will soon be posted at the Department's website: http://www.state.nj.us/dep/aqpp/publicnotices.htm. The public comment period closes on February 13, 2014.

Should you want more information regarding this Consolidated Alternative Site Information Screening Analysis or if you would like to comment, please call me at 609-633-1129.



QN 5014 BCO 17, 2014 SQU June 17, 2014

Mr. Frank Steitz Bureau of Operating Permits New Jersey Department of Environmental Protection 401 East State Street, 2nd Floor Trenton, NJ 08625-0027

UPS OVERNIGHT AIRBILL NUMBER 1Z07479R0191890182

Reference:

Hess Newark Energy Center, Newark, Essex County, New Jersey;

Program Interest Number 08857; Permit Activity Number BOP 130001

Dear Mr. Steitz:

On behalf of Hess Newark Energy Center (NEC), The WCM Group, Inc. (WCM) is submitting an application for a minor modification to the Air Pollution Control Operating Permit BOP 130001 in accordance with N.J.A.C. 7:27-22.23. This application requests revisions to the stack locations and stack parameters to reflect "as built" conditions for multiple emission sources authorized by this Operating Permit. NEC is proposing with this application corrections and clarifications to the Operating Permit language. The proposed changes will not affect the current monitoring, recordkeeping and reporting provisions for these sources. Please note that the requested revisions will not result in a physical change that will trigger PSD applicability since there will not be a change in the permitted emission rates. Additionally this minor modification application is seeking to apply emission reduction credits to offset emission increases as outlined in Facility Specific Requirements Ref.#16.

BACKGROUND

NEC is currently constructing a natural gas-fired electrical generation combined cycle facility. The facility consists of two GE Frame 7FA combustion turbines each equipped with supplementally fired heat recovery steam generators (HRSGs), one (1) steam turbine generator (STG), a mechanical draft wet cooling tower, associated auxiliary boiler, and balance of plant equipment and systems. Each combustion turbine is equipped with Dry Low NOx combustors. Selective Catalytic Reduction (SCR) is used to control NOx emissions and a CO oxidation catalyst has been installed to control CO emissions from the combustion turbines and supplementally fired HRSG. The initial Operating Permit was approved on November 1, 2012 and has subsequently undergone an administrative amendment that was approved on January 7, 2013. Construction for the facility commenced in November 2012 with an anticipated start of operation in late 2014.

REQUESTED STACK CHANGES

The Emissions Points Inventory of the Operating Permit identifies stack parameters (i.e., Equivalent Diameter, Height, Exhaust Temperature, etc.) for the emission sources (i.e., Turbine 1, Turbine 2, Emergency Generator, Fire Pump and Cooling Tower) that were represented in the initial permit application. The initial permit application representations were based upon preliminary design information. The facility is currently under construction and NEC is proposing to update the permit representations with the final design and construction (i.e., "as built") information from the stack parameters for the various emissions sources. Note that the character and quantity of emissions from these sources have not changed from the current permit allowable potential to emit. Although there are no changes in the character or quantity of emissions, the ambient concentrations of pollutants (i.e., NO₂, PM₁₀ and PM_{2.5}) have increased but remain below their respective PSD Significant Impact Levels (SILs). Therefore, NEC is proposing to authorize the "as built" stack changes as a minor modification to the Operating Permit pursuant to N.J.A.C. 7:27-22.23(c)5. The proposed changes will not result in a change to the existing monitoring, recordkeeping or reporting requirements outlined in the current Operating Permit for these sources.

A summary of the proposed "as built" changes is provided in Table 1. From the table, NEC is proposing a smaller stack diameter for the combustion turbines and duct fired HRSGs (i.e., 18.5 feet vs 22 feet). An atmospheric dispersion modeling demonstration for this change was submitted to Mr. Alan Dresser (NJDEP) on September 16, 2013 (see Attachment A). Additional "as built" changes in stack parameters (i.e., stack height, exhaust velocity, stack temperature and locations) have been identified for the emergency engines and cooling tower which are noted in Table 1. Note that none of the proposed "as built" revisions reflects a change in the quantity or character of emissions currently authorized in the Operating Permit. The "as built" changes in stack parameters do not significantly impact the air impacts modeling demonstration performed for the initial application. Atmospheric dispersion modeling has been performed utilizing the "as built" stack parameters. The emergency engines are intermittent sources which will each operate less than 100 hours per year and therefore were only included in the 1-hour NO₂ modeling demonstration. The cooling tower was included in the PM_{2.5} modeling demonstration. A discussion of this atmospheric dispersion modeling demonstration and the results are provided as Attachment B.

TABLE 1
HESS NEWARK ENERGY CENTER
BOP130001
EMISSION POINT INVENTORY

NOL	(i)	IT VALUES TER (IN.)	ILUES IETER	IT VALUES F	LUES F	IT VALUES RTY LINE	S DIST. TO LINE		E	XHAUST TE	MP. (DEC	G. F)		EXHAUST	EXHAUST VOLUME (AC			
DESCRIPTION	CONFIG	CURRENT PERMIT VALUE EQUIV. DIAMETER (IN.)	AS BUILT VALUES EQUIV. DIAMETER (IN.)	CURRENT PERMIT HEIGHT (FT.)	AS BUILT VALUES HEIGHT (FT.)	CURRENT PERMIT VALUES DIST. TO PROPERTY LINE (FT.)	AS BUILT VALUES DIST. T PROPERTY LINE (FT.)	CURRENT PERMIT VALUES AVG.	AS BUILT VALUESAVG.	CURRENT PERMIT VALUES MIN.	AS BUILT VALUES MIN.	CURRENT PERMIT VALUES MAX.	AS BUILT VALUES MAX.	AVG.	MIN.	MAX.	DISCHARGE DIRECTION	PT SET ID
Turbine 1, HRSG & Aux. Boiler Emission Point	Round	264.0	222.0	252.0	NC	185.0	NC	181.2	NC	161.3	NC	300.0	NC	1121050.0	0.0	1232750.0	U	
Turbine 1, HRSG Emission Point	Round	264.0	222.0	252.0	NC	185.0	NC	181.2	NC	161.3	NC	187.3	NC	1121050.0	0.0	1232750.0	U p	
Emergency Generator Emission Point	Round	12.0	NC	50.0	15.0	422.0	273.0	775.9	948.7	775.9	948.7	775.9	948.7	11174.0	0.0	11174.0	U	
Fire Pump Emission Point	Round	12.0	6.0	50.0	20.0	283.0	240.0	750.0	826.0	750.0	826.0	750.0	826.0	1644.0	0.0	1644.0	U	
Cooling Tower Emission Point (diameter is per cell)	Round	360.0	427.5	65,0	71.7	23.0	NC	85.0	NC	120.0	NC	120.0	NC	3944.0	0.0		υ	

NC = No Change.

CORRECTIONS AND CLARIFICATIONS

The Applicable Requirement outlined in U1 OS Summary, Ref.#7 and the Emissions Point Inventory of the Operating Permit identify the emission point for the Auxiliary Boiler as PT1. The correct designation should be PT3 for the Auxiliary Boiler. The Auxiliary Boiler exhaust was represented in the atmospheric modeling report as exhausting through a separate stack. Footnote "a" to Table 4-2 in Section 4.5 of the Revised Dispersion Modeling Report (dated April 2012) states, "The auxiliary boiler will exhaust through a separate stack adjacent to a HRSG stack." Therefore NEC respectfully requests that the emission point representations for the Auxiliary Boiler be updated throughout the Operating Permit to reflect PT3. The proposed changes will not result in a change to the potential to emit or monitoring, recordkeeping or reporting requirements outlined in the current Operating Permit for these sources.

The Facility Specific Requirements for U1 2 Turbines, 2 HRSGs and Aux. Boiler for OS Summary Ref.#95 through #98 appear to be only applicable to the Auxiliary Boiler. The language in these requirements refers to 40 CFR Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units and the Auxiliary Boiler is the only source at this facility that is subject to the applicable provisions of this New Source Performance Standard. Please add language to clarify that the requirements Ref.#95 through #98 are only applicable to Auxiliary Boiler. The proposed changes will not result in a change to the potential to emit or monitoring, recordkeeping or reporting requirements outlined in the current Operating Permit for these sources.

EMISSION REDUCTION CREDITS

In accordance with GR1, Ref.#16 of the Operating Permit, the Submittal/Action Requirement specifies NEC to submit an Administrative Amendment application to apply emission reduction credits to offset emission increases prior to initial startup of the turbines [N.J.A.C. 7:27-18.3(c)1]. As the project is subject to Nonattainment New Source Review, NEC must secure offsets for the nonattainment pollutants for which the proposed potential emissions are greater than the pollutant's significant net emissions increase threshold. The offset ratios increase based on the distance of the offsets from the project's location. For the NEC project, offsets are required for both NO_X and VOC. The minimum offset ratio is 1.3:1 for both NO_X and VOC, pursuant to N.J.A.C. 7:27-18.5. The use of creditable emission reductions (CERs) credits to offset NO_X and VOC emissions must be within 100 miles from the 1.3:1 ratios to apply. Therefore, multiplying the proposed potential to emit (PTE) by 1.3 results in a requirement for 180.83 tons per year (tpy) of NO_X (NO_X PTE = 139.10 tpy) offsets, and 45.5 tons of VOC (VOC PTE = 34.99 tpy) offsets. NEC

has secured the required NO_X and VOC emission offsets from sources within 100 miles of the site.

Table 2 identifies the NO_X CERs that have been purchased by and transferred to NEC. NEC is proposing with this minor modification application to apply 180.83 tons of the transferred CERs to offset the NO_X emissions increases associate with this project. NEC is requesting that the 180.83 tons of CERs that are being retired or applied to this Operating Permit be those with the earliest expiration date.

 $\label{eq:table 2} \mbox{NO}_{\mbox{\tiny X}} \mbox{ CREDITABLE EMISSION REDUCTIONS (CERs)}$

DATE ¹	AMOUNT OF NO _X CERs (tons)	BANK LOGGING NUMBER	TRANSFER BANKING LOG NUMBERS
		BK-M9-0003	TM12-0015
5/31/2012	11.08	BK-M9-0005	TM12-0016
		BK-M9-006	TM12-0017
6/21/2012	13.40	BK-M8-0002	T-M12-0020
6/15/2012	6.00	BK-00-0187	T-M12-0018
	3.555	BK-M6-0001	TM12-0010
	1.685	BK-M6-0002	TM12-0009
	1.695	BK-M6-0003	TM12-0008
6/27/2012	1.485	BK-M6-0004	TM12-0012
	1.465	BK-M6-0005	TM12-0011
	0.63	BK-M6-0006	TM12-0007
	0.115	BK-M6-0008	TM12-00013
6/15/2012	42.90	BK-95-0016	T-M12-0019
6/27/2012	67.07	BK-M7-0007	TM12-0014
3/29/2012	41.20	BK-M7-0002	TM12-0005
TOTAL CERS ²	192.28		

NOTES: 1 Date of letter from NJDEP recognizing transfer of CERs.

NEC is proposing to apply 180.83 tons of these CERs to offset the NO_X increases associated with this project.

Table 3 identifies the VOC CERs that have been purchased by and transferred to NEC. NEC is proposing with this minor modification application to apply 45.5 tons of the transferred CERs to offset the VOC emissions increases associate with this project. NEC is requesting that the 45.5 tons of CERs that are being retired or applied to this Operating Permit be those with the earliest expiration date.

TABLE 3
VOC CREDITABLE EMISSION REDUCTIONS (CERs)

DATE ¹	AMOUNT OF VOC CERs (tons)	BANK LOGGING NUMBER	TRANSFER BANKING LOG NUMBERS
6/15/2012	25.80	BK-95-0016	T-M12-0019
6/28/2012	1.30	BK-M8-0002	TM12-0022
6/27/2012	94.04	BK-M6-0001	TM12-0010
TOTAL CERS ²	121.14		

NOTES: 1

- Date of letter from NJDEP recognizing transfer of CERs.
- NEC is proposing to apply 45.5 tons of these CERs to offset the VOC increases associated with this project.

As the submittal of this minor modification application satisfies the Submittal/Action Requirement of GR1, Ref.#16 of the Operating Permit, NEC is respectfully requesting the removal of this requirement from the reissued Operating Permit.

CLOSING

In summary, the proposed minor modification application requests changes to the stack dispersion parameters to reflect "as built" conditions that will not affect the quantity or character of emissions but will result in an increase in the ambient concentrations of air contaminants. This application seeks to make minor corrections and clarifications to the language in the Operating Permit. Additionally, this minor modification application seeks to apply CERs to offset the emission increases associated with this project to satisfy Nonattainment New Source Review. The proposed changes in this minor modification application do not impact the current monitoring, recordkeeping and reporting provisions of the Operating Permit. The Operating Permit

Modification Application has been prepared in Radius Version 4.0.09 and is being submitted electronically via DEP online. A paper copy of the application is being provided to the USEPA Region II Office.

Should you have any questions regarding the information provided, please contact me at your earliest convenience.

Sincerely,

Donny A. Hearn Senior Vice President, Technical Services

DAH/kkc 8730015.ltr.docx

Enclosures

cc:

S. Matthew – Hess-NEC USEPA Region II

NJDEP Regional Office

Modification Application has been prepared in Radius Version 4.0.09 and is being submitted electronically via DEP online. A paper copy of the application is being provided to the USEPA Region II Office.

Should you have any questions regarding the information provided, please contact me at your earliest convenience.

Sincerely,

Donny A. Hearn

Senior Vice President, Technical Services

DAH/kkc 8730015.ltr.docx

Enclosures

CC:

S. Matthew – Hess-NEC USEPA Region II NJDEP Regional Office

ATTACHMENT A ATMOSPHERIC DISPERSION MODELING DEMONSTRATION DATED SEPTEMBER 16, 2013



September 16, 2013

Mr. Alan Dresser New Jersey Department of Environmental Protection Air Quality Permitting Program 401 East State Street, 2nd Floor P.O. Box 027 Trenton, New Jersey 08625

Subject: Dispersion Modeling for Revised Stack Diameters

Hess Newark Energy Center

Dear Mr. Dresser:

As discussed with you previously, the final design configuration for the Hess Newark Energy Center project includes a stack diameter (18.5 feet) which is different than what was originally evaluated (22 feet) with dispersion modeling in support of Hess Newark Energy, LLC's original PSD permit application (Newark Energy Center Project, Dispersion Modeling Report, November 2011). While we agreed that the smaller stack diameter would likely result in dispersion model predicted impact concentrations that are either less than, or the same as, the concentrations that were predicted previously for the larger stack diameter, updated modeling was conducted for the smaller stack diameter to confirm this understanding.

The updated modeling was based on the same dispersion model (AERMOD version 11103) and meteorological data set (Newark Airport surface / Brookhaven NY upper air for period 2005-2009) as was used for the original modeling analysis. The updated analysis has evaluated the same range of turbine load conditions as originally evaluated and presented in the Tables 4-1 and 4-3 (start-up conditions) of the November 2011 Modeling Report. The stack parameters that were considered for the updated modeling were based on the smaller stack diameter and the associated revised exit velocity. The revised stack parameters are presented in attached Table A along with the original stack parameters for comparison. The maximum AERMOD-predicted impact concentrations are presented in Table B for both the original and updated stack parameters for the both the single turbine stack and two turbine combined stack scenarios under the range of operating load conditions. These results are based on unitized (1 g/s) emission rates per turbine. Table B also presents the difference between the AERMOD-predicted concentrations for the original permitted stack diameter and the revised stack diameter. This evaluation demonstrates that the maximum concentrations predicted for the revised stack diameter are either equal to, or less than, the concentrations predicted for the original stack diameter. Therefore, no additional analysis is needed.

Please don't hesitate to call me (617-443-7554) if you have any questions.

Sincerely,

Tetra Tech, Inc.

Frederick M Sellars

Vice President – Energy Programs

Attachment

TABLE A: Hess Newark Energy Center - Stack Parameters for Original Permitted and Revised Stack Diameter Scenarios	

Operating Case	1	5	13	15	22	33	34	35	36	38	Cold Start	Warm Start
Diameter (ft)	22	22	22	22	22	22	22	22	22	22	22	22
Diameter (m)	6.706	6.706	6.706	6.706	6.706	6.706	6.706	6.706	6.706	6.706	6.706	6.706
Area (ft2)	380.13	380.13	380.13	380.13	380.13	380.13	380.13	380.13	380.13	380.13	380.13	380.13
Velocity (ft/s)	54.04	49.15	48.29	48.79	47.83	38.09	36.78	38.75	31.43	32.68	31.40	21.65
Velocity (m/s)	16.47	14.98	14.72	14.87	14.58	11.61	11.21	11.81	9.58	9.96	9.57	6.60
Flow (ft3/hr)	73946288.4	67256551.3	66089214.7	66762678.1	65460648.8	52126072.2	50330169.6	53024023.4	43011866.6	44717974	42966969	29632392.4
Combined Diameter (ft)	31.113	31.113	31.113	31.113	31.113	31.113	31.113	31.113	31.113	31.113	31.113	31.113
Combined Diameter (m)	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483	9.483
Revised Stack Diameter (18.5 feet):											
Onenstine Core		The second secon										
Operating Case	1	5	13	15	22	33	34	35	36	38	Cold Start	Warm Start
Diameter (ft)	18.5	5 18.5	13 18.5	15 18.5	22 18.5	33 18.5	34 18.5	35 18.5	36 18.5	38 18.5	Cold Start 18.5	Warm Start
	1 18.5 5.639	Charles and the second				7.7					18.5	18.5
Diameter (ft)		18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5 5.639	18.5 5.639
Diameter (ft) Diameter (m)	5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639	18.5 5.639 268.80	18.5 5.639 268.80
Diameter (ft) Diameter (m) Area (ft2)	5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80	18.5 5.639 268.80 46.21	18.5 5.639 268.80 44.40	18.5 5.639 268.80 30.62
Diameter (ft) Diameter (m) Area (ft2) Velocity (ft/s)	5.639 268.80 76.42	18.5 5.639 268.80 69.50	18.5 5.639 268.80 68.30	18.5 5.639 268.80 68.99	18.5 5.639 268.80 67.65	18.5 5.639 268.80 53.87	18.5 5.639 268.80 52.01	18.5 5.639 268.80 54.79	18.5 5.639 268.80 44.45	18.5 5.639 268.80 46.21 14.09	18.5 5.639 268.80 44.40 13.53	18.5 5.639 268.80 30.62 9.33
Diameter (ft) Diameter (m) Area (ft2) Velocity (ft/s) Velocity (m/s)	5.639 268.80 76.42 23.29	18.5 5.639 268.80 69.50 21.18	18.5 5.639 268.80 68.30 20.82	18.5 5.639 268.80 68.99 21.03	18.5 5.639 268.80 67.65 20.62	18.5 5.639 268.80 53.87 16.42	18.5 5.639 268.80 52.01 15.85	18.5 5.639 268.80 54.79 16.70	18.5 5.639 268.80 44.45 13.55	18.5 5.639 268.80 46.21	18.5 5.639 268.80 44.40	18.5 5.639 268.80 30.62

TABLE B: Hess Newark Energy Center - AERMOD Results for Original Permitted (22 feet) and Revised Stack Diameter (18.5 feet) Scenarios Based on Unit (1 g/s) Emissions

Original Permittee												
Case	1	5	13	15	22	33	34	35	36	38	Cold Start	Warm Start
AERMOD Results	(single turbine st	ack)										
Annual	0.01811	0.02017	0.01999	0.02097	0.02093	0.0276	0.02773	0.02698	0.03421	0.03145	0.03106	0.04338
1-hr	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.43417	1.33341	1.33341	1.6383
3-hr	0.67138	0.70841	0.70587	0.7728	0.75624	0.99108	0.99453	0.96964	1.22631	1.10186	1.15195	
8-hr	0.58853	0.63003	0.62809	0.64658	0.648	0.79975	0.80742	0.77367	1.0392	0.93986	0.92728	
24-hr	0.28759	0.31251	0.31144	0.32098	0.32195	0.39437	0.39635	0.38787	0.51149	0.45849	0.45	
AERMOD Results	(two turbines / c	ombined stac	k)									
Annual	0.02077	0.02305	0.02272	0.02411	0.02398	0.03272	0.03295	0.03185	0.04186	0.03811	0.03765	0.05562
1-hr	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682			
3-hr	1.07672	1.07672	1.07672	1.07672	1.07672					2.66682	2.66682	2.66682
8-hr	0.83633	0.9072	0.90854	0.92712		1.27729	1.28016	1.25337	1.62469	1.49542	1.44285	2.00913
24-hr	0.37865	0.43129			0.9338	1.12728	1.13696	1.11199	1.32548	1.2298	1.22341	1.70498
24-111	0.37803	0.43129	0.43113	0.44815	0.44487	0.55185	0.55408	0.54328	0.6676	0.60986	0.60391	0.8176
Revised Stack Dia	meter (18.5 feet)		42	45		1		1				
		5	13	15	22	33	34	35	36	38	Cold Start	Warm Start
AERMOD Results												
Annual	0.01729	0.01904	0.01882	0.01977	0.0197	0.02559	0.02574	0.02494	0.03157	0.02908	0.02877	0.03951
1-hr	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.33341	1.51386
3-hr	0.59557	0.68693	0.68298	0.69536	0.69618	0.89719	0.90318	0.86472	1.07451	1.00353	0.99659	1.35814
8-hr	0.53521	0.57574	0.57826	0.58784	0.59035	0.72927	0.7362	0.71682	0.87069	0.80309	0.80223	1.16284
24-hr	0.26884	0.28695	0.28644	0.293	0.2939	0.36485	0.36841	0.35836	0.43024	0.40323	0.40281	0.59407
AERMOD Results	(two turbines / co	ombined stack	k)									
Annual	0.02	0.02211	0.02178	0.02306	0.02293	0.03025	0.03026	0.02948	0.03771	0.03444	0.03404	0.04956
1-hr	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682	2.66682
3-hr	1.07672	1.07672	1.07672	1.07672	1.07672	1.12584	1.1346	1.10737	1.38338	1.30512	1.30185	1.82772
8-hr	0.73828	0.81145	0.81488	0.82782	0.83527	1.03813	1.05615	1.02067	1.20963	1.15184	1.15705	1.48686
24-hr	0.30268	0.34632	0.35211	0.36546	0.37746	0.51255	0.51747	0.50407	0.59832	0.56437	0.56204	0.73607
AERMOD Results	DIFFFRFNCF (22 f	t - 18 5 ft star	k diam) - Posi	tive value ind	icatas concont	ration docros	sas with now.	emanilou etasele i	Jin			
Case	1 1	5	13	15	22	33	34 J	35	36	38	C-14 C4-4	14/
AERMOD Results		The same of the sa		13	22	33	34	33	36	30	Cold Start	Warm Start
Annual	0.00082	0.00113	0.00117	0.0013	0.00122	0.00201	0.00400	0.00004				
1-hr				0.0012	0.00123	0.00201	0.00199	0.00204	0.00264	0.00237	0.00229	0.00387
	0	0	0	0	0	0	0	0	0.10076	0	0	0.12444
3-hr	0.07581	0.02148	0.02289	0.07744	0.06006	0.09389	0.09135	0.10492	0.1518	0.09833	0.15536	0.0872
8-hr	0.05332	0.05429	0.04983	0.05874	0.05765	0.07048	0.07122	0.05685	0.16851	0.13677	0.12505	0.09778
24-hr	0.01875	0.02556	0.025	0.02798	0.02805	0.02952	0.02794	0.02951	0.08125	0.05526	0.04719	0.04808
AERMOD Results I	DIFFERENCE (two	turbines / co	mbined stack)									
Annual	0.00077	0.00094	0.00094	0.00105	0.00105	0.00247	0.00269	0.00237	0.00415	0.00367	0.00361	0.00606
1-hr	0	0	0	0	0	0	0	0	0	0.00507	0.00301	0.00000
3-hr	0	0	0	0	0	0.15145	0.14556	0.146	0.24131	0.1903	0.141	0.18141
8-hr	0.09805	0.09575	0.09366	0.0993	0.09853	0.08915	0.08081	0.09132	0.24131	0.1903	0.06636	
24-hr	0.07597	0.08497	0.07902	0.08269	0.05855	0.0393						0.21812
	0.07337	0.00457	0.07302	0.00203	0.00741	0.0393	0.03661	0.03921	0.06928	0.04549	0.04187	0.08153

ATTACHMENT B UPDATED ATMOSPHERIC DISPERSION MODELING DEMONSTRATION

UPDATED AIR DISPERSION MODELING TO REFLECT AS-BUILT CONDITIONS

INTRODUCTION

Hess Newark Energy Center (NEC) is currently constructing a natural gas-fired electrical generation combined cycle facility. NEC is proposing to update the Operating Permit representations with the final design and construction (i.e., "as built") information for the stack parameters for the various sources. The initial representations utilized in the air permit application and subsequent atmospheric dispersion modeling demonstration were based upon preliminary design information. Although the proposed "as built" changes in stack parameters will not result in a change in emissions, the changes will have an impact on the ambient air concentrations for the respective pollutants. NEC is proposing to update the atmospheric dispersion modeling with the "as built stack parameters" and utilizing the same dispersion model and meteorological data as was used for the original modeling analysis. The paragraphs below describe the results of the updated atmospheric dispersion modeling.

AS-BUILT MODIFICATIONS

The "as built" stack parameter changes that affect the dispersion modeling in support of NEC's original PSD application (Newark Energy Center Project, Dispersion Modeling Report, November 2011) include the following:

(1) The cooling tower was constructed with a height of 71.66 feet (21.84 meters) and a 427.5 inch diameter (10.858 meters) for each of the twelve cells. In addition, each of the 12 fans will move air at the rate of 1,324,000 actual cubic feet per minute (acfm). The resultant exit velocity is 22.14 feet per second (6.75 meters per second). The cooling tower was originally modeled at a height of 65 feet (19.81 m) and a diameter of 379 inches (9.632 meters) for each cell. The modeled velocity was 27.89 feet per second (8.50 meters per second). The resultant air flow was 1,312,350 acfm.

The cooling tower only emits particulate matter. Therefore, these changes only affect the $PM_{2.5}$ and PM_{10} modeling.

(2) The emergency generator engine was constructed in a different location than what was originally proposed. In addition, the stack servicing the emergency generator engine was constructed with a height of 15 feet (4.57 meters). The proposed height as originally modeled was 53.5 feet (16.307 meters). Lastly, the temperature and exhaust air flow have been modified. The as-built temperature of the exhaust is 948.7°F (782.43°K) and the air flow is 2,610 acfm. The temperature and air flow as originally modeled are 773.6°F

(685.15°K) and 1,040 acfm. The "as built" exhaust velocity is 55.39 feet per second (16.88 meters per second). The exhaust velocity was originally modeled was 22.05 feet per second (6.72 meters per second).

Emergency generator emissions were only included in the annual NO_2 modeling. Therefore, these changes only affect the annual NO_2 modeling.

(3) The firewater pump engine was constructed in a different location than what was originally proposed. In addition, the stack servicing the firewater pump engine was constructed with a height of 20 feet (6.10 meters). The proposed height as originally modeled was 30 feet (9.144 meters). Also, the stack was constructed with a diameter of 6 inches (0.1524 meters). The stack was originally modeled with a diameter of 8 inches (0.203 meters). Lastly, the temperature and exhaust air flow have been modified. The "as built" temperature of the exhaust is 826°F (714.26°K) and the air flow is 2,214 acfm. The temperature and air flow as originally modeled are 725°F (658.15°K) and 154 acfm. The "as built" exhaust velocity is 187.93 feet per second (57.28 meters per second). The exhaust velocity was originally modeled was 7.35 feet per second (2.24 meters per second).

Fire water pump emissions were only included in the annual NO₂ modeling. Therefore, these changes only affect the annual NO₂ modeling.

The changes discussed above are listed in Table 1.

TABLE 1
ORIGINAL MODELING PARAMETERS COMPARED TO AS-BUILT PARAMETERS

The state of the s		NAL WODE					NO-DOIL	LANAME	ILIXO		
				C	ooling Tow	/er					
	Location		Stack	Stack Height		Temperature		Velocity		neter	Air Flow
Scenario	X-Coord.	Y-Coord.				romporataro		Velocity			
	(m)	(m)	(ft)	(m)	(°F)	(°K)	(ft/s)	(m/s)	(ft)	(m)	(acfm)
Original Modeling ¹	Sook	Note 3	65	19.812	Amb+50	Amb+10	27.89	8.5	31.6	9.632	1,312,350
As-Built ²	3661	vote 3	71.66	21.842	Amb+50	Amb+10	22.14	6.75	35.63	10.858	1,324,000
Emergency Generator Engine											
	Location		Ctast	. I. I. a Saula A	-						Air Flow
Scenario	X-Coord.	Y-Coord.	Stack Height		Temperature		Velocity		Diar	meter	
	(m)	(m)	(ft)	(m)	(°F)	(°K)	(ft/s)	(m/s)	(ft)	(m)	(acfm)
Original Modeling ¹	-120.94	-85.10	53.5	16.307	775	685.15	22.05	6.72	1	0.3048	1,040
As-Built ²	-41.25	-42.97	15	4.572	948.7	782.43	55.39	16.882	1	0.3048	2,610
				Fire Wa	ater Pump	Engine				the state of	
	Loca	ation									
Scenario	X-Coord.	Y-Coord.	Stack	Height	Tempe	erature	Ve	locity	Diar	neter	Air Flow
	(m)	(m)	(ft)	(m)	(°F)	(°K)	(ft/s)	(m/s)	(ft)	(m)	(acfm)
Original Modeling ¹	-120.55	-20.42	30	9.144	725	658.15	7.35	2.24	0.667	0.203	154
As-Built ²	-64.95	-103.57	20	6.096	826	714.26	187.93	57.281	0.5	0.1524	2,214

Notes: 1 Source: Modeling Report dated April 27, 2012

2 Source: Letter from Skanska-SNC Lavalin JV dated March 7, 2014

The locations for the 12 cells of the cooling tower did not change

<u>UPDATED ATMOSPHERIC DISPERSION MODELING</u>

The updated modeling is based on the same dispersion model (AERMOD version 12060) and meteorological data set that were used for the May 2012 revised dispersion modeling. Surface data collected at Newark Airport and upper air data collected at Brookhaven for the period from 2005 to 2009 was used. Because of the change in location and stack heights, downwash was re-evaluated using the same EPA program, BPIP-Prime (BPIPPRM version 04274), that was used previously. In addition, the same receptor grid that was used previously is used in this updated modeling demonstration.

The previous modeling for $PM_{2.5}$ included the cooling tower with an emission rate of 0.005 grams of $PM_{2.5}$ per second for each cell. This is equivalent to 0.4762 pounds of $PM_{2.5}$ per hour for the entire cooling tower. The cooling tower is limited by the current Operating Permit to emit no more than 0.47 pounds of $PM_{2.5}$ per hour. Therefore, for this modeling exercise, the cooling tower emission rate is limited to 0.47 pounds of $PM_{2.5}$ per hour. This translates to 0.004935 grams of $PM_{2.5}$ per second per cooling tower cell. This is the $PM_{2.5}$ emission rate that was modeled.

The previous modeling for PM_{10} included the cooling tower with an emission rate of 0.013 grams of PM_{10} per second for each cell. This is equivalent to 1.29 pounds of PM_{10} per hour for the entire cooling tower. The cooling tower is limited by the current Operating Permit to emit no more than 1.33 pounds of PM_{10} per hour. Therefore, for this modeling exercise, the cooling tower emission rate is limited to 1.33 pounds of PM_{10} per hour. This translates to 0.01396 grams of PM_{10} per second per cooling tower cell. This is the PM_{10} emission rate that was modeled.

The updated atmospheric dispersion modeling analysis for NO₂ includes the same emission rates as the previous modeling. These rates are based on annual permit allowables in the Operating Permit.

<u>UPDATED ATMOSPHERIC DISPERSION MODELING RESULTS</u>

The updated atmospheric dispersion modeling results continue to demonstrate that the predicted impacts are at acceptable levels. The results are discussed below.

$PM_{2.5}$

The previous modeling exercise demonstrated that the predicted 24-hour $PM_{2.5}$ concentration was 1.15 μ g/m³. This was based on the average of the maximum 24-hour $PM_{2.5}$ concentration from each year. The updated atmospheric dispersion modeling results for $PM_{2.5}$ modeling results are presented in the following table:

<u>Table 2</u> PM_{2.5} Modeling Results

	Maximum Predicted Impacts		5-Year Average	Significant Impact Level		
Year	24-Hour	Annual	24-Hour	24-Hour	Annual	
	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	
2005	1.21	0.276				
2006	1.03	0.283				
2007	1.06	0.274	1.18	1.2	0.3	
2008	1.26	0.269				
2009	1.36	0.253				

As shown in Table 2, the predicted 24-hour 5-year average impact, 1.18 μ g/m³, remains less than the Significant Impact Level (SIL), 1.2 μ g/m³. In addition, the maximum predicted annual impact, 0.283 μ g/m³, is less than the annual SIL, 0.3 μ g/m³. Therefore, no further analysis is required.

PM₁₀

The previous modeling exercise demonstrated that the predicted 24-hour PM_{10} concentration was 3.17 $\mu g/m^3$. This was based on the maximum 24-hour PM_{10} concentration from each year. The updated atmospheric dispersion modeling results for PM_{10} modeling results are presented in the following table:

Table 3
PM₁₀ Modeling Results

	Maximum Predicted Impacts	Significant Impact Level
Year	24-Hour	24-Hour
	(µg/m³)	(µg/m³)
2005	3.43	
2006	2.92	
2007	2.99	5
2008	3.57	
2009	3.85	

As shown in Table 3, the predicted maximum 24-hour impact, $3.85 \mu g/m^3$, remains below the Significant Impact Level (SIL), $5 \mu g/m^3$. Therefore, no further analysis is required.

NO_2

The previous modeling exercise demonstrated that the predicted annual NO_2 concentration was 0.42 μ g/m³. This was based on the maximum annual NO_2 concentration from each year. The updated atmospheric dispersion modeling results for NO_2 modeling results are presented in the following table:

Table 4
NO₂ Modeling Results

	Maximum Predicted Impacts	Significant Impact Level			
Year	Annual	Annual			
	(µg/m³)	(µg/m³)			
2005	0.605				
2006	0.586				
2007	0.585	1			
2008	0.540				
2009	0.573				

As shown in Table 4, the predicted maximum annual impact, $0.605 \, \mu g/m^3$, remains below the Significant Impact Level (SIL), $1 \, \mu g/m^3$. Therefore, no further analysis is required.

SUMMARY

The "as built" stack parameters have been incorporated into the previous modeling demonstration for the initial PSD permit application. Although there are no change in the permitted emission rates, the "as built" stack parameters impact ambient air concentration of several pollutants. The "as built" changes in stack parameters affect the previous 24-hour and annual $PM_{2.5}$ impacts, 24-hour PM_{10} impacts, and annual NO_2 impacts. The updated atmospheric dispersion modeling was performed to predict potential impacts based on the as-built parameters. The updated atmospheric dispersion modeling demonstrates the predicted impacts of the affected air pollutants continue to be less than appropriate SILs. Therefore, no further analysis is required.

New Jersey Draft Renewal Operating Permit Notice Shafi Ahmed to: Suilin Chan, Yolanda Majette, Steven Riva 06/15/2011 11:31 AM Cc: "Shafi Ahmed", "Sunila Agrawal" Show Details

Operating Permit Renewal for Hess Newark Delancy Terminal Program Interest Number: 07735, Permit Activity Number: BOP100001

As a courtesy, I am providing you with this notice of New Jersey's intent to approve an Air Pollution Control Operating Permit Renewal for Hess Newark Delancy Terminal, which is located at 1111 Delancy Street, Newark, NJ 07105. The public notice, statement of basis, and the draft permit will soon be posted at the Department's website: http://www.state.nj.us/dep/aqpp/publicnotices.htm. The public comment period closes on 7/22/2011. This notice isn't meant to replace the "proposed permit" process in 40CFR70.

The facility has represented compliance with all the applicable requirements. Therefore, there are no compliance schedules included with this permit approval.

Should you want more information regarding this draft permit or if you would like to comment, please call Sunila Agrawal at 609-292-9202.



State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTIN Commissioner

Division of Air Quality
Bureau of Air Permits
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

July 27, 2011

Mr. Steve Riva, Chief Permitting Section USEPA, Region 2 290 Broadway, 25th Floor New York, NY 10007-1866

Re:

HESS NEWARK DELANCY TERMINAL

Facility Program Interest No. 07735, Permit Activity No.: BOP100001

PROPOSED OPERATING PERMIT RENEWAL

Dear Steve:

This Proposed Air Pollution Control Operating Permit Renewal for Hess Newark Delancy Terminal, which is located at 1111 Delancy Street, Newark, NJ 07105, has completed the 30-day public comment period. No comments were received during the public comment period.

No comments were received from the EPA during the public comment period.

Should you want more information regarding this proposed permit, please call me at 609-292-9202.

Sincerely,

SAgrawal
Sunila Agrawal

Bureau of Air Permits







State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTIN Commissioner

KIM GUADAGNO Lt. Governor Division of Air Quality
Bureau of Air Permits
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

Air Pollution Control Operating Permit Operating Permit Renewal

Permit Activity Number: BOP100001

Program Interest Number: 07735

Mailing Address	Plant Location
PETER HAID	HESS NEWARK DELANCY TERMINAL
DIR REGULATORY & ENV COMPLIANCE	1111 Delancy St
HESS CORP	Newark City
1 HESS PLAZA	Essex County
Woodbridge, NJ 07095	

Initial Operating Permit Approval Date: August 9, 2001

Operating Permit Renewal Approval Date: September 27, 2011 Operating Permit Renewal Expiration Date: August 8, 2016

This operating permit renewal is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). The facility shall be operated in accordance with the requirements of this permit.

This operating permit renewal hereby supersedes any previous Air Pollution Control Operating Permit issued to the facility by the Department, and any significant modification, minor modification, seven-day notice change, or administrative amendment to such permit.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, this permit shield does not cover physical changes which were undertaken at the facility after March 3, 2003 and for which the facility did not seek a PSD applicability determination from USEPA. The issuance of this permit should not in any way be construed as a determination by the Department that the PSD rules do not apply. Any questions on applicability of PSD should be directed to EPA Region II, Air Programs Branch, 21st Floor, 290 Broadway, New York, NY 10007-1866.

This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19. The certification shall be submitted electronically through the NJDEP online web portal — Periodic Compliance Certification service, and shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official. Access to DEP Online shall be obtained by following the instructions at: http://www.state.nj.us/dep/online/. The certification should be printed for submission to EPA. The schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect. If unable to submit electronically, the certification shall be submitted on forms provided by the Department at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year, as required by paragraph 13 in Section F, General Provisions and Authorities, of this permit, if the annual compliance certification is submitted by January 30.

New Jersey Department of Environmental Protection Air & Environmental Quality Enforcement 401 East State Street, P. O. Box 422 Trenton, New Jersey 08625-0422 United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, New York 10007-1866

New Jersey Department of Environmental Protection Air and Environmental Quality Compliance & Enforcement Northern Regional Enforcement Office 7 Ridgedale Aveneue Cedar Knolls, New Jersey 07927

Your facility's current approved operating permit and any previous versions (e.g. superseded, expired, or terminated) are now available for download in the PDF format at: http://www.nj.gov/dep/aqpp/. After accessing the website, click on "Approved Operating Permits" listed under "Reports" and then type in the Program Interested (PI) Number as instructed on the screen. A RADIUS file for your permit, containing Facility Specific Requirements (Compliance Plan), Inventories, and Compliance Schedules (if needed), can be obtained by contacting your permit writer. Upon importing this information into your personal computer with RADIUS software, you will have up-to-date information in RADIUS format. RADIUS software, instructions, and help are available at the Department's website at www.state.nj.us/dep/aqpp. We also have an Operating Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to someone about any questions you may have. The Operating Permit Help Line number is 609-633-8248.

The permittee is responsible for submitting a timely and administratively complete operating permit renewal application. The Operating Permit Renewal Application consists of a RADIUS application and the Application Attachment available in Portable Document Format (PDF) and MS Word format at the Department's website http://www.nj.gov/dep/aqpp/applying.html (check Attachment to the RADIUS Operating Permit Renewal Application). Both the RADIUS application and the Application Attachment, along with any other supporting documents (saved on a CD) must be submitted with a cover letter (paper copy). The application is considered timely if it is received at least 12 months before the expiration date of the operating permit. To be deemed administratively complete, an application for renewal of the operating permit shall include all of the information required by the application form for the renewal and the information required pursuant to N.J.A.C. 7:27-22.30(d). However, consistent with N.J.A.C. 7:27-22.30(c), the permittee is encouraged to submit the renewal application at least 15 months prior to expiration of the operating permit, so that the Department can notify the applicant of any deficiencies in the application. This will allow the permittee to correct any deficiencies, and to better ensure that the application is administratively complete by the renewal deadline. Only applications which are timely and administratively complete will be eligible for coverage by an application shield.

Permittees that are subject to Compliance Assurance Monitoring (CAM), pursuant to 40 CFR 64, shall develop a CAM Plan for modified equipment as well as existing sources. Details of the rule and guidance on how to prepare a plan can be found at EPA's website: www.epa.gov/ttn/emc/cam.html. In addition, CAM Plans must be included as part of the permit renewal application. Permittees that do not submit a CAM Plan may have their modification applications denied, pursuant to N.J.A.C. 7:27-22.3.

If, in your judgment, the Department is imposing any unreasonable condition of approval, you may contest the Department's decision and request an adjudicatory hearing pursuant to N.J.S.A. 52:14b-1 et seq. and N.J.A.C. 7:27-22.32(a). All requests for an adjudicatory hearing must be received in writing by the Department within 20 calendar days of the date you receive this letter. The request must contain the information specified at in N.J.A.C. 7:27-1.32 and the information on the enclosed Administrative Hearing Request Checklist and Tracking Form.

If you have any questions regarding this permit approval, please call your permit writer, Shafi Ahmed, at (609) 633-2971.

Approved by:

SAgrawal
Sunila Agrawal

Sunila Agrawal Bureau of Air Permits

Enclosure

CC: S. Riva, USEPA Region II



ENVIRONMENTAL PROTECTIO

State of New Jersey

2011 AUG -2 PM 1: 14

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DEPARTMENT OF ENVIRONMENTAL PROTECTION DEPP - APP

BOBNISAIRIRIN

KIM GUADAGNO Lt. Governor

Division of Air Quality Bureau of Air Permits 401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02 Trenton, NJ 08625-0420

July 27, 2011

Mr. Steve Riva, Chief **Permitting Section** USEPA, Region 2 290 Broadway, 25th Floor New York, NY 10007-1866

Re:

HESS NEWARK DELANCY TERMINAL

Facility Program Interest No. 07735, Permit Activity No.: BOP100001

PROPOSED OPERATING PERMIT RENEWAL

Dear Steve:

This Proposed Air Pollution Control Operating Permit Renewal for Hess Newark Delancy Terminal, which is located at 1111 Delancy Street, Newark, NJ 07105, has completed the 30-day public comment period. No comments were received during the public comment period.

No comments were received from the EPA during the public comment period.

Should you want more information regarding this proposed permit, please call me at 609-292-9202.

Sincerely,

SAgrawol Sunila Agrawal

Bureau of Air Permits



State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO Lt. Governor Division of Air Quality
Bureau of Air Permits
401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02
Trenton, NJ 08625-0420

BOB MARTIN Commissioner

February 17, 2011

Mr. Steve Riva Chief, Permitting Section USEPA, Region 2 290 Broadway, 25th Floor New York, NY 10007-1866

Re:

Hess Corporation - Newark Delancy Terminal

Facility Program Interest No. 07735, Permit Activity No.: BOP110002

Dear Steve:

This notice is required by the provisions of 40 CFR Part 70 and N.J.A.C. 7:27-22 and is to inform you of the Department's receipt of an administratively complete application for a minor modification to an approved Operating Permit for Hess Corporation – Newark Delancy Terminal, which is located at 1111 Delancy St, Newark, NJ 07102.

The facility proposes to store ethanol in the facility internal storage tanks. There are no emissions increases from this modification.

If you would like to comment on this application, please contact me in writing at the above address within 45 days. The 45-day review period expires on April 6, 2011 Should you want more information regarding this minor modification, please call me at 609-984-6349.

Sincerely

Yaso Sivaganesh Bureau of Air Permits



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Operating Permits
401 E. State Street, 2nd floor
P.O. Box 27
Trenton, NJ 08625-0027



JON S. CORZINE Governor

August 31, 2006

VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Tracking Number: 7005 1160 0004 0971 5231

Mr. Pete Haid Mgr. Refining & Marketing Reg. & Env. Comp. Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095

Re:

Hess Newark Delancy Street Terminal. - OPERATING PERMIT RENEWAL

Permit Activity Number: BOP050001 Program Interest Number: 07735

Dear Mr. Haid:

Enclosed is an approved operating permit renewal for the above-referenced facility. This operating permit renewal supersedes the previous Air Pollution Control Operating Permit issued to the facility, and any significant modification, minor modification, seven-day notice change, or administrative amendment to the permit.

If, in your judgement, the Department is imposing any unreasonable condition of approval, you may contest the Department's decision and request an adjudicatory hearing pursuant to N.J.S.A. 52:14b-1 et seq. and N.J.A.C. 7:27-22.32(a). All requests for an adjudicatory hearing must be received in writing by the Department within 20 calendar days of the date you receive this letter. The request must contain the information specified at in N.J.A.C. 7:27-1.32 and the information on the enclosed Administrative Hearing Request Checklist and Tracking Form.

If you have any questions regarding this permit approval, please call your permit writer, Yaso Sivaganesh, at 609-984-6349.

Sincerely,

Robert Mann

Bureau of Operating Permits

Enclosure

C: Steve Riva, USEPA Region II (diskette containing final permit)
Northern REO (w/o enclosure)

Y. Sivaganesh (w/o enclosure)



State of New Jersey

Environmental Regulation

Division of Air Quality

Air Quality Permitting Element P. O. Box 27 Trenton, NJ 08625-0027

DEPARTMENT OF ENVIRONMENTAL PROTECTION JON S. CORZINE Governor

LISA P. JACKSON Commissioner

Air Pollution Control Operating Permit Operating Permit Renewal

Permit Activity Number: BOP050001

Program Interest Number: 07735

Mailing Address	Plant Location
PETER HAID	HESS NEWARK DELANCY ST TERMINAL
MGR REFINING & MARKETING REG & ENV	1111 Delancy St
COMP	Newark City
HESS CORPORATION	Essex County
1 HESS PLAZA	
Woodbridge, NJ 07095	

Initial Operating Permit Approval Date:

August 9, 2001

Operating Permit Renewal Approval Date:

September 1, 2006

Operating Permit Renewal Expiration Date:

August 8, 2011

This operating permit renewal is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). This permit shall allow for inspection and evaluation to assure conformance with all provisions of N.J.A.C. 7:27 et seq.

This operating permit renewal hereby supersedes any previous Air Pollution Control Operating Permit issued to the facility by the Department, and any significant modification, minor modification, seven-day notice change, or administrative amendment to such permit. Equipment at the facility shall be operated in accordance with the enclosed permit conditions.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, this permit shield does not cover physical changes which were undertaken at the facility after March 3, 2003 and for which the facility did not seek a PSD applicability determination from USEPA. The issuance of this permit should not in any way be construed as a determination by the Department that the PSD rules do not apply. Any questions on applicability of PSD should be directed to EPA Region II, Air Compliance Branch, 21st Floor, 290 Broadway, New York, NY 10007-1866.

This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year, as required by paragraph 13 in Section F, General Provisions and Authorities, of this permit, if the annual compliance certification is submitted by January 30.

> Revision 2.5 11/21/05

New Jersey Department of Environmental Protection Air & Environmental Quality Enforcement 401 East State Street, P. O. Box 422 Trenton, New Jersey 08625-0422 United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, New York 10007-1866

New Jersey Department of Environmental Protection Air and Environmental Quality Compliance & Enforcement Northern Regional Enforcement Office 7 Ridgedale Ave. Cedar Knolls, New Jersey 07927

We are including a diskette with an electronic file. This file contains the information included in the paper version of the operating permit. Upon importing this information into your personal computer with RADIUS software, you will have up-to-date information in RADIUS format. RADIUS software, instructions, and help are available at the Department's website at www.state.nj.us/dep/aqpp.. We also have an Operating Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to someone about any questions you may have. The Operating Permit Help Line number is 609-633-8248.

If you have any questions regarding this permit approval, please call your permit writer, Yaso Sivaganesh, at (609) 984-6349.

Approved by:

Robert Mann

Bureau of Operating Permits

nas

Enclosure

CC: S. Riva, USEPA Region II (diskette containing permit)

M. Papp - NRO (w/o enclosure)

Y. Sivaganesh (w/o enclosure)

K. Kalim (w/o enclosure)



State of New Jersey Department of Environmental Protection

JON S. CORZINE

Governor

Bureau of Operating Permits 401 E. State Street, 2nd floor P.O. Box 27 Trenton, NJ 08625-0027 LISA P. JACKSON Commissioner

June 27, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Steve Riva, Chief Chief, Permitting Section USEPA, Region 2 290 Broadway, 25th Floor New York, NY 10007-1866

Dear Steve:

Pursuant to N.J.A.C. 7:27-22.12, enclosed please find a diskette containing the proposed operating permit renewal for the Hess Newark Delancy Street Terminal, 1111 Delancy Street, Newark, NJ for your review.

This proposed operating permit renewal has completed the 30-day public comment period. Comments were received from Hess only. The Department's response letter to Hess addressing these comments is attached for your information.

No comments were received from the EPA during the public comment period.

Please feel free to call me with any questions or concerns at 609-633-3839.

Sincerely,

Robert Mann

Bureau of Operating Permits

Enclosure: Diskette containing proposed permit

C. Yaso Sivaganesh (w/o enclosure)



State of New Jersey

JON S. CORZINE Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION **Environmental Regulation** Division of Air Quality Air Quality Permitting Element P. O. Box 27 Trenton, NJ 08625-0027

LISA P. JACKSON Commissioner

Air Pollution Control Operating Permit Operating Permit Renewal

Proposed

Permit Activity Number: BOP050001

Program Interest Number: 07735

Mailing Address	Plant Location
PETER HAID	HESS NEWARK DELANCY ST TERMINAL
MGR REFINING & MARKETING REG & ENV	1111 Delancy St
COMP	Newark City
HESS CORPORATION	Essex County
1 HESS PLAZA	,
Woodbridge, NJ 07095	

Initial Operating Permit Approval Date:

August 9, 2001

Operating Permit Renewal Approval Date:

TBD

Operating Permit Renewal Expiration Date:

August 8, 2011

This operating permit renewal is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). This permit shall allow for inspection and evaluation to assure conformance with all provisions of N.J.A.C. 7:27 et seq.

This operating permit renewal hereby supersedes any previous Air Pollution Control Operating Permit issued to the facility by the Department, and any significant modification, minor modification, seven-day notice change, or administrative amendment to such permit. Equipment at the facility shall be operated in accordance with the enclosed permit conditions.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, this permit shield does not cover physical changes which were undertaken at the facility after March 3, 2003 and for which the facility did not seek a PSD applicability determination from USEPA. The issuance of this permit should not in any way be construed as a determination by the Department that the PSD rules do not apply. Any questions on applicability of PSD should be directed to EPA Region II, Air Compliance Branch, 21st Floor, 290 Broadway, New York, NY 10007-1866.

This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year, as required by paragraph 13 in Section F, General Provisions and Authorities, of this permit, if the annual compliance certification is submitted by January 30.

> Revision 2.5 11/21/05

New Jersey Department of Environmental Protection Air & Environmental Quality Enforcement 401 East State Street, P. O. Box 422 Trenton, New Jersey 08625-0422 United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, New York 10007-1866

New Jersey Department of Environmental Protection Air and Environmental Quality Compliance & Enforcement Northern Regional Enforcement Office 7 Ridgedale Ave. Cedar Knolls, New Jersey 07927

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If you have any questions regarding this permit approval, please call your permit writer, Yaso Sivaganesh, at (609) 984-6349.

Appro	ved by:
Robert	Mann
ICOCOLO	

Enclosure

CC:

S. Riva, USEPA Region II (diskette containing permit)

M. Papp - NRO (w/o enclosure)

Y. Sivaganesh (w/o enclosure)

K. Kalim (w/o enclosure)

RESPONSE TO COMMENTS DOCUMENT

for

An Air Pollution Control Operating Permit Renewal Application

for

Hess Newark-Delancy Street Terminal 1111 Delancy Street Newark, New Jersey 07105

Robert Mann

Bureau of Operating Permits

Mor

6-27-06

Date

Written comments on the draft approval were received from the applicant. No other comments were received. Responses to the comments received are addressed in this document.

(a) Comment:

Permit Cover Page, Statement of Basis, Table of Contents, Facility Profile(General)-Contact Type:"Organization".

The Corporate name has been changed from "Amerada Hess Corporation" to "Hess Corporation". An Administrative Amendment has been submitted to reflect this change. Please change the company name to "Hess Corporation".

Response:

The Department approved the Administrative Amendment BOP060001 on June 27, 2006, reflecting the changes requested.

(b) Comment:

Facility Profile: Environmental Officer; General Contact; Responsible Official-Fax Number.

Please change the fax number to: 732-750-7044.

Response:

The requested change was made.

(c) Comment:

Statement of Basis, Pollutant Emissions Summary Table

Based on the Pollutant Emissions Summary Table, HAP emissions should total 6.5 tons per year, not 6.0 tons per year.

Response:

The Section C Pollutant Emissions Summary table was corrected to reflect the correct HAP emission of 6.0 tons per year.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Environmental Regulation Division of Air Quality Air Quality Permitting Element P. O. Box 27 Trenton, NJ 08625-0027

Air Pollution Control Operating Permit Administrative Amendment

Program Interest Number: 07735

ISA P. JACKSON

Commissioner

Permit Activity Number: BOP060001

JON S. CORZINE

Governor

Mailing Address	Plant Location
PETER HAID	HESS NEWARK DELANCY TERMINAL
ENV MGR	1111 Delancy St
HESS CORP	Newark City
1 HESS PLAZA	Essex County
Woodbridge, NJ 07095	

Initial Operating Permit Approval Date: Administrative Amendment Approval Date:

Operating Permit Expiration Date:

August 9, 2001 June 27, 2006

August 8, 2006

The operating permit, which incorporates this administrative amendment, is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). Equipment at the facility must be operated in accordance with the requirements of this amended permit.

This administrative amendment changed the Corporate Name to Hess Corporation.

The operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, changes approved under this administrative amendment do not include a permit shield. This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

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If, in your judgement, the Department is imposing any unreasonable condition of approval in this permit action, you may contest the Department's decision and request an adjudicatory hearing pursuant to N.J.S.A. 52:14b-1 et seq. and N.J.A.C. 7:27-22.32(a). All requests for an adjudicatory hearing must be received in writing by the Department within 20 calendar days of the date you receive this letter. The request must contain the information requested in N.J.A.C. 7:27-1.32 and the information on the enclosed Administrative Hearing Request Checklist and Tracking Form.

If you have any questions regarding this permit approval, please call your permit writer, Yaso Sivaganesh, at (609) 984-6349.

Approved by:

Robert Mann

Air Quality Permitting Element

Enclosure

CC: S. Riva, USEPA Region II (diskette containing modified permit)

M. Papp - NRO (w/o enclosure)

Y. Sivaganesh (w/o enclosure)